APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,504	05/08/2001	Theodore F. Vaida	01-036	2218

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EXAMINER
DUONG, DUC T

ART UNIT	PAPER NUMBER
2616	

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09/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	09/851,504	VAIDA ET AL.
	Examiner	Art Unit	
	Duc T. Duong	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>21 June 2007</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
  closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-7,9-17 and 19-44</u> is/are pending in the application.

  4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) <u>21-42</u> is/are allowed.

6)☒ Claim(s) <u>1-7,9-17,19,20,43 and 44</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

  a)☐ All   b)☐ Some * c)☐ None of:

  1.☐ Certified copies of the priority documents have been received.

  2.☐ Certified copies of the priority documents have been received in Application No. _____.

  3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
    application from the International Bureau (PCT Rule 17.2(a)).

  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
  Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-7, 9-17, 19, 20, 43, and 44 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Starr et al (US Patent 6,807,581 B1) in view of Pandya et al

(US Patent 6,792,502 B1).

Regarding to claims 1 and 11, Starr discloses a programmable network

application specific integrated circuit 700 (fig. 15 col. 20 lines 25-27), comprising a

media access controller 722-728 configured to transmit and receive network data (fig.

15 col. 20 lines 61-67 and col. 21 lines 1-7); a programmable logic core 780 (fig. 15 col.

21 lines 43-47) having an arithmetic logic unit 902 (fig. 17C col. 24 lines 6-8) that are

dynamically configurable to implement a plurality of application level functions capable

of generating meta-data (col. 21 lines 56-59), said programmable logic core 780

configured to interface with said media access controller 722-728 and implement least

one said plurality of application level functions (col. 32 lines 18-39).

Starr fails to teach for an array of arithmetic logic units.

However, Pandya discloses a processor 310 comprising a plurality arithmetic

logic units ALUs (fig. 8 col. 12 lines 19-24).

Thus, it would have been obvious to a person of ordinary skill in the art to

arrange for a plurality of arithmetic logic units ALUs as taught by Pandya in Starr's

system to speed up or/and enhance the processor functions.

Regarding to claims 2 and 12, Starr discloses the programmable logic core 780

may be programmed while said least one application level function executing (col. 22

lines 23-26).

Regarding to claims 3, and 13, Starr discloses the programmable network

application specific integrated circuit 700 comprising a data interconnect subsystem 756

configured to transmit and receive said network data from said MP-block (fig. 15 col. 21

lines 32-33) and a function master subsystem 740 configured to receive said meta-data

from said MP-block and dynamically program said programmable logic units 780 (fig. 15

col. 22 lines 1-15).

Regarding to claims 4 and 14, Starr discloses the data interconnect system 756

is further configured to transmit and receive said network data from a host system 20

(fig. 1 col. 5 lines 9-13).

Regarding to claims 5 and 15, Starr discloses the function master subsystem 740

is configured to transmit said meta-data to a host system 20 and capable of receiving

programming instructions from said host system 20 (fig. 1 col. 6 lines 15-39).

Regarding to claims 6 and 16, Starr discloses the function master subsystem 350

is capable of programming said programmable logic core 310 based upon said meta-

data (fig. 1 col. 6 lines 40-57).

Regarding to claim 7 and 17, Starr discloses the function master subsystem 740 is capable of programming said programming logic core based upon said network data (fig. 1 col. 6 lines 58-67).

Regarding to claims 9 and 19, Starr discloses at least one application level function is a validation of packet (col. 6 lines 58-63).

Regarding to claims 10 and 20, Starr discloses the programmable logic core 700 includes a management interface 732-738 configured to control and manage said media access controller 722-728 (fig. 15 col. 21 lines 8-19).

Regarding to claim 43, Starr discloses the arithmetic logic units are register transfer level (RTL) configurable (fig. 17C col. 24 lines 8-10).

Regarding to claim 44, Starr discloses at least one application level function is a content based addressing (col. 6 lines 58-63).

Response to Arguments

3.   Applicant's arguments filed June 21, 2007 have been fully considered but they are not persuasive. Regarding to applicant's argument on page 14, Pandya fails to teach for a plurality of ALU's. In response, the examiner would like to direct applicant to the previously cited col. 12 lines 19-24. Herein, Pandya does not only explicitly discloses of "at least one" ALU as asserted by applicant, but also a plurality of ALUs specifically in col. 12 lines 21-22. Regarding to applicant's argument on pages 14-15, the plurality of ALUs in Pandya does not read on "an **array** of arithmetic logic units" as claimed. In response, the examiner would like to point out the word "array" by definition is just a collection or a large group of quantity of things. In this instant, the broadest

interpretation is given to the word **array** as a **plurality** of arithmetic logic units. In

response to applicant's argument that the references fail to show certain features of

applicant's invention, it is noted that the features upon which applicant relies (i.e., an

array of dynamically configurable arithmetic logic units contains an array of 16 (4x4) hex

blocks) are not recited in the rejected claim(s). Although the claims are interpreted in

light of the specification, limitations from the specification are not read into the claims.

See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Thus, based

on the reasons set forth here the rejections are maintained.

Allowable Subject Matter

4.   Claims 21-42 are allowed.

Conclusion

5. .   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Duc T. Duong whose telephone number is 571-272-

3122. The examiner can normally be reached on M-F (9:00 AM-6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Wing Chan can be reached on 571-272-7493. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DD
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9/10/07

WING CHAN
SUPERVISORY PATENT EXAMINER